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EXAMINER

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ART UNIT

PAPER NUMBER

2684

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4

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/922,813

Applicant(s)

HOWARD ET AL.

Examiner

Raymond S Dean

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 - 69 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 - 69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 2.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 15, 24 – 31, and 42 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandelman et al. (6,160,477) in view of Petite et al. (US 2002/0019712) and in further view of Watkins (US 2002/0198978).

Regarding Claim 1, Sandelman teaches a communications module for facilitating wireless electronic communications with an electronic device (Figure 1, Column 6 lines 30 – 33, Column 6 lines 38 – 46, the electronic message delivery server is the communications module), the module comprising: a modem for communicating with the computer through a communications network (Figure 3a, Column 7 lines 13 – 16, the message is sent via a telephone line to the internet thus there will be an inherent modem such that said message can be sent, computers connect to the internet for access to email thus there is an inherent computer) and a memory for storing data (Column 7 lines 45 – 52, the messages can be stored thus there will be memory for the storage of said messages).

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Sandelman does not specifically teach a processor, a wireless module in electronic communication with the processor for wireless communications with the electronic device, a paging module in electronic communication with the processor for communicating with a computer through a paging network, a modem in electronic communication with the processor, and a memory in electronic communication with the processor.

Petite teaches a processor (Figure 4, Section 0051 lines 5 – 7) and a wireless module in electronic communication with the processor for wireless communications with the electronic device (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Sandelman and Petite (Section 0040 lines 11 – 15) both teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the processor and wireless module taught in Petite in the electronic message delivery server in Sandelman for the purpose of sending and receiving data transmissions to and from the HVAC systems via wireless links thereby creating a portable electronic message delivery system that can communicate with said HVAC system from a plurality of locations as taught by Petite.

Sandelman in view of Petite does not specifically teach a paging module for communicating with a computer through a paging network.

Watkins teaches a paging module for communicating through a paging network (Figure 1, Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

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Sandelman in view of Petite and Watkins (Section 0013 lines 1 – 5, Section 0019 lines 1 – 3) teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the paging module taught in Watkins in the electronic message delivery server in Sandelman in view of Petite for the purpose of providing an alternative wireless means for remotely controlling and monitoring said HVAC system as taught by Watkins.

Regarding Claim 2, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Petite further teaches wherein the memory is programmed with instructions to cause the processor to communicate with the electronic device using the wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15, Section 0051 lines 5 – 7, the microcontroller controls the operation of the site controller, there is software or instructions that enables said microcontroller to control the operation of said site controller, these instructions are executed every time that said site controller is powered up and communicating with the transceivers thus there will be memory for the storage of said instructions).

Regarding Claim 3, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches wherein the memory is programmed with instructions to cause a communication with the computer (Column 7 lines 13 – 16, Column 7 lines 55 – 57, the drivers are the software or instructions, said drivers will be used on a

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regular basis for the transmission of the various messages thus there will be memory for the storage of said drivers), Petite further teaches a processor (Figure 4, Section 0051 lines 5 – 7), and Watkins further teaches a paging module (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Regarding Claim 4, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches wherein the memory is programmed with instructions to cause communication with the computer through the communications network using a modem (Column 7 lines 13 – 16, Column 7 lines 55 – 57, the drivers are the software or instructions, said drivers will be used on a regular basis for the transmission of the various messages thus there will be memory for the storage of said drivers, the message is sent via a telephone line to the internet thus there will be an inherent modem such that said message can be sent), Petite further teaches a processor (Figure 4, Section 0051 lines 5 – 7).

Regarding Claim 5, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Watkins further teaches wherein the paging module is a one-way paging module for receiving pages (Section 0035 lines 17 – 20).

Regarding Claim 6, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Petite further teaches wherein the processor is a microcontroller (Figure 4).

Regarding Claim 7, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman

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further teaches programmed to periodically contact the computer (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times, said user can access said email via a computer).

Regarding Claim 8, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches programmed to periodically contact the computer using the modem (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times, said user can access said email via a computer, the message is sent via a telephone line to the internet thus there will be an inherent modem such that said message can be sent).

Regarding Claim 9, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 8. Sandelman further teaches programmed to maintain an outbound message queue for outbound messages being sent from the electronic device to the computer (Column 8 lines 31 – 36).

Regarding Claim 10, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 9. Sandelman further teaches programmed to send the outbound messages to the computer when the computer is periodically contacted (Column 6 lines 30 – 33, Column 6

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lines 38 – 46, Column 8 lines 31 – 36, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times).

Regarding Claim 11, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times).

Regarding Claim 12, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times), Petite further teaches a wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Regarding Claim 13, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 12. Sandelman further teaches programmed to maintain an outbound message queue for outbound messages received form the electronic device (Column 8 lines 31 – 36).

Regarding Claim 14, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 13. Sandelman



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further teaches programmed to store the outbound messages received from the electronic device in the outbound message queue (Column 8 lines 31 – 36).

Regarding Claim 15, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 14. Sandelman further teaches programmed to send the outbound messages to the computer when the computer is periodically contacted (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 8 lines 31 – 36, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times).

Regarding Claim 24, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 1. Sandelman further teaches programmed to contact the computer using the modem in response to a request communication (Column 6 lines 38 – 46, Column 7 lines 13 - 16), Watkins further teaches a communication received through the paging module (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Regarding Claim 25, Sandelman teaches a communications module for facilitating electronic communications between a computer and a remote electronic device wherein the communications module is programmed to contact the computer through a communications network (Figure 1, Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, a user can access the email via a computer accessing the internet, the electronic message delivery server is the communications module), the module comprising: a modem for communicating with the computer through a communication network (Figure 3a,

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Column 7 lines 13 – 16, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent, computers connect to the internet for access to email thus there is a computer) and a memory for storing data (Column 7 lines 45 – 52, the messages can be stored thus there will be memory for the storage of said messages).

Sandelman does not teach wherein the computer is programmed to send pages to the communications module through a paging network, a processor, a wireless module in electronic communication with the processor for wireless communications with the electronic device, a paging module in electronic communication with the processor for receiving pager communications from the computer through the paging network, a modem in electronic communication with the processor, and a memory in electronic communication with the processor.

Petite teaches a processor (Figure 4, Section 0051 lines 5 – 7) and a wireless module in electronic communication with the processor for wireless communications with the electronic device (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Sandelman and Petite (Section 0040 lines 11 – 15) both teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the processor and wireless module taught in Petite in the electronic message delivery server in Sandelman for the purpose of sending and receiving data transmissions to and from the HVAC systems via wireless links thereby creating

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a portable electronic message delivery system that can communicate with said HVAC system from a plurality of locations as taught by Petite.

Sandelman in view of Petite does not teach wherein the computer is programmed to send pages to the communications module through a paging network and a paging module for receiving pager communications from the computer through the paging network.

Watkins teaches sending pages to through a paging network and a paging module for receiving pager communications through a paging network (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Sandelman in view of Petite and Watkins (Section 0013 lines 1 – 5, Section 0019 lines 1 – 3) teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the paging module taught in Watkins in the electronic message delivery server in Sandelman in view of Petite for the purpose of providing an alternative wireless means for remotely controlling and monitoring said HVAC system as taught by Watkins.

Regarding Claim 26, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 25. Petite further teaches wherein the communications module is programmed with instructions to cause the processor to communicate with the electronic device using the wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15, Section 0051 lines 5 – 7, the microcontroller controls the operation of the site controller, there

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is software or instructions that enables said microcontroller to control the operation of said site controller).

Regarding Claim 27, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 26. Watkins further teaches programmed with pager instructions to cause the processor to receive the pager communications using the pager network (Section 0035 lines 10 – 15, Section 0035 lines 17 – 20).

Regarding Claim 28, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 27. Sandelman further teaches programmed with modem instructions to cause communications with the computer through the communications network using the modem (Column 7 lines 13 – 16, Column 7 lines 55 – 57, the drivers are the software or instructions, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent), Petite further teaches a processor (Figure 4, Section 0051 lines 5 – 7).

Regarding Claim 29, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 28. Watkins further teaches wherein the paging module is a one-way paging module for receiving pages (Section 0035 lines 17 – 20).

Regarding Claim 30, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 29. Petite further teaches wherein the processor is a microcontroller (Figure 4).

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Regarding Claim 31, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 30. Sandelman further teaches programmed to periodically contact the computer using the modem (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times, said user can access said email via a computer, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent).

Regarding Claim 42, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 28. Sandelman further teaches programmed to contact the computer using the modem in response to a request communication (Column 6 lines 38 – 46, Column 7 lines 13 - 16), Watkins further teaches a communication received through the paging module (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Regarding Claim 43, Sandelman teaches a communications module for facilitating electronic communications between a computer and a plurality of remote electronic devices wherein the communications module is programmed to contact the computer through a communications network (Figure 1, Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, a user can access the email via a computer accessing the internet, the electronic message delivery server is the communications module), the module comprising: a modem for communicating with the computer through a communication network (Figure 3a,

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Column 7 lines 13 – 16, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent, computers connect to the internet for access to email thus there is a computer) and a memory for storing data (Column 7 lines 45 – 52, the messages can be stored thus there will be memory for the storage of said messages).

Sandelman does not teach wherein the computer is programmed to send pages to the communications module through a paging network, a processor, a wireless module in electronic communication with the processor for wireless communications with the plurality of electronic devices, a paging module in electronic communication with the processor for receiving pager communications from the computer through the paging network, a modem in electronic communication with the processor, and a memory in electronic communication with the processor.

Petite teaches a processor (Figure 4, Section 0051 lines 5 – 7) and a wireless module in electronic communication with the processor for wireless communications with the plurality of electronic devices (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Sandelman and Petite (Section 0040 lines 11 – 15) both teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the processor and wireless module taught in Petite in the electronic message delivery server in Sandelman for the purpose of sending and receiving data transmissions to and from the HVAC systems via wireless links thereby creating

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a portable electronic message delivery system that can communicate with said HVAC system from a plurality of locations as taught by Petite.

Sandelman in view of Petite does not teach wherein the computer is programmed to send pages to the communications module through a paging network and a paging module for receiving pager communications from the computer through the paging network.

Watkins teaches sending pages through a paging network and a paging module for receiving pager communications through a paging network (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Sandelman in view of Petite and Watkins (Section 0013 lines 1 – 5, Section 0019 lines 1 – 3) teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the paging module taught in Watkins in the electronic message delivery server in Sandelman in view of Petite for the purpose of providing an alternative wireless means for remotely controlling and monitoring said HVAC system as taught by Watkins.

Regarding Claim 44, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 43. Petite further teaches wherein the communications module is programmed with instructions to cause the processor to communicate with the plurality of electronic devices using the wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15, Section 0051 lines 5 – 7, the microcontroller controls the operation of the site controller,

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there is software or instructions that enables said microcontroller to control the operation of said site controller).

Regarding Claim 45, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 44. Watkins further teaches programmed with pager instructions to cause to receive the pager communications using the pager network (Section 0035 lines 10 – 15, Section 0035 lines 17 – 20), Petite further teaches a processor (Figure 4).

Regarding Claim 46, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 45. Sandelman further teaches programmed with modem instructions to cause communications with the computer through the communications network using the modem (Column 7 lines 13 – 16, Column 7 lines 55 – 57, the drivers are the software or instructions, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent), Petite further teaches a processor (Figure 4, Section 0051 lines 5 – 7).

Regarding Claim 47, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 46. Watkins further teaches wherein the paging module is a one-way paging module for receiving pages (Section 0035 lines 17 – 20).

Regarding Claim 48, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 47. Petite further teaches wherein the processor is a microcontroller (Figure 4).



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Regarding Claim 49, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 48. Sandelman further teaches programmed to periodically contact the computer using the modem (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times, said user can access said email via a computer, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent).

3. Claims 16 – 23, 32 – 41, and 50 – 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sandelman et al. (6,160,477) in view of Petite et al. (US 2002/0019712) in further view of Watkins (US 2002/0198978), as applied to Claims 8, 31, 49 above, and further in view of Smith et al. (US 2002/0016639).

Regarding Claim 16, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 8. Sandelman in view of Petite and in further view of Watkins does not teach maintaining an inbound message queue for inbound messages being sent to the electronic device from the computer.

Smith teaches maintaining an inbound message queue for inbound messages being sent to the electronic device (Section 0090 lines 8 – 10, Section 0149 lines 5 – 8, Section 0150 lines 4 – 7, the messages to be sent to the various subsystems can be stored in a message queue).

Sandelman in view of Petite and in further view of Watkins and Smith teach a remote control system that controls an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inbound message queue taught in Smith in the remote system of Sandelman in view of Petite and in further view of Watkins for the purpose of enabling a user to remotely control said HVAC system as taught by Smith.

Regarding Claim 17, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 16. Petite further teaches programmed to receive the inbound messages from the computer when the computer is periodically contacted (Section 0029 lines 8 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 18, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 17. Smith further teaches programmed to store the inbound messages in the inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 19, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 18. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times).

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Regarding Claim 20, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 18. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times), Petite further teaches a wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Regarding Claim 21, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 19. Petite further teaches programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communication module (Section 0029 lines 1 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 22, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 18. Petite further teaches wherein each inbound message includes a device ID (Section 0055, Section 0056 lines 1 – 10).

Regarding Claim 23, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 22. Petite further teaches programmed to identify the electronic device when the electronic device periodically contacts the communication module

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(Section 0056 lines 1 – 10) and further programmed to search for appropriate inbound messages for the electronic device and to transmit the appropriate inbound messages to the electronic device (Section 0029 lines 1 – 12, Section 0056 lines 1 – 10, the messages will be addressed to the desired transceiver and transmitted to said transceiver), Smith further teaches an inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 32, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 31. Sandelman in view of Petite and in further view of Watkins does not teach maintaining an inbound message queue for inbound messages being sent to the electronic device from the computer.

Smith teaches maintaining an inbound message queue for inbound messages being sent to the electronic device (Section 0090 lines 8 – 10, Section 0149 lines 5 – 8, Section 0150 lines 4 – 7, the messages to be sent to the various subsystems can be stored in a message queue).

Sandelman in view of Petite and in further view of Watkins and Smith teach a remote control system that controls an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inbound message queue taught in Smith in the remote system of Sandelman in view of Petite and in further view of Watkins for the purpose of enabling a user to remotely control said HVAC system as taught by Smith.

Regarding Claim 33, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited

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in Claim 32. Petite further teaches programmed to receive the inbound messages from the computer when the computer is periodically contacted (Section 0029 lines 8 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 34, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 33. Smith further teaches programmed to store the inbound messages in the inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 35, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 34. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times), Petite further teaches a wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Regarding Claim 36, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 35. Petite further teaches programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communication module (Section 0029 lines 1 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 37, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 36. Petite further teaches wherein each inbound message includes a device ID (Section 0055, Section 0056 lines 1 – 10).

Regarding Claim 38, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 37. Petite further teaches programmed to identify the electronic device when the electronic device periodically contacts the communication module (Section 0056 lines 1 – 10) and further programmed to search for appropriate inbound messages for the electronic device and to transmit the appropriate inbound messages to the electronic device (Section 0029 lines 1 – 12, Section 0056 lines 1 – 10, the messages will be addressed to the desired transceiver and transmitted to said transceiver), Smith further teaches an inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 39, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 38. Sandelman further teaches programmed to maintain an outbound message queue for outbound messages received from the electronic device (Column 8 lines 31 – 36).

Regarding Claim 40, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 39. Sandelman further teaches programmed to store the outbound

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messages received from the electronic device in the outbound message queue (Column 8 lines 31 – 36).

Regarding Claim 41, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 40. Sandelman further teaches programmed to send the outbound messages to the computer when the computer is periodically contacted (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 8 lines 31 – 36, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times).

Regarding Claim 50, Sandelman in view of Petite and in further view of Watkins teaches all of the claimed limitations recited in Claim 49. Sandelman in view of Petite and in further view of Watkins does not teach maintaining an inbound message queue for inbound messages being sent to the plurality of electronic devices from the computer.

Smith teaches maintaining an inbound message queue for inbound messages being sent to the plurality of electronic devices (Section 0090 lines 8 – 10, Section 0149 lines 5 – 8, Section 0150 lines 4 – 7, the messages to be sent to the various subsystems can be stored in a message queue).

Sandelman in view of Petite and in further view of Watkins and Smith teach a remote control system that controls an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inbound message queue taught in Smith in the remote system of

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Sandelman in view of Petite and in further view of Watkins for the purpose of enabling a user to remotely control said HVAC system as taught by Smith.

Regarding Claim 51, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 50. Petite further teaches programmed to receive the inbound messages from the computer when the computer is periodically contacted (Section 0029 lines 8 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 52, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 51. Smith further teaches programmed to store the inbound messages in the inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 53, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 52. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times), Petite further teaches a wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Regarding Claim 54, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited



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in Claim 53. Petite further teaches wherein each inbound message includes a device ID (Section 0055, Section 0056 lines 1 – 10).

Regarding Claim 55, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 54. Petite further teaches programmed to identify the electronic device when the electronic device periodically contacts the communication module (Section 0056 lines 1 – 10) and further programmed to search for appropriate inbound messages for the electronic device and to transmit the appropriate inbound messages to the electronic device (Section 0029 lines 1 – 12, Section 0056 lines 1 – 10, the messages will be addressed to the desired transceiver and transmitted to said transceiver), Smith further teaches an inbound message queue (Section 0150 lines 4 – 7).

Regarding Claim 56, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 55. Sandelman further teaches programmed to maintain an outbound message queue for outbound messages received from the plurality of electronic devices (Column 8 lines 31 – 36).

Regarding Claim 57, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 56. Sandelman further teaches programmed to store the outbound messages received from the plurality of electronic devices in the outbound message queue (Column 8 lines 31 – 36).

Regarding Claim 58, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 57. Sandelman further teaches programmed to send the outbound messages to the computer when the computer is periodically contacted (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 8 lines 31 – 36, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times).

Regarding Claim 59, Sandelman teaches a method for facilitating electronic communications between a computer and a remote electronic device (Figure 1, Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, a user can access the email via a computer accessing the internet, the electronic message delivery server is the communications module), wherein the communications module comprises: a modem for communicating with the computer through a communication network (Figure 3a, Column 7 lines 13 – 16, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent, computers connect to the internet for access to email thus there is a computer) and a memory for storing data (Column 7 lines 45 – 52, the messages can be stored thus there will be memory for the storage of said messages), receiving an outbound message from the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 8 lines 31 – 36); storing the outbound message in an outbound message queue (Column 8 lines 31 – 36); and sending the outbound message to the computer

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from the communication module (Column 6 lines 38 – 46, Column 7 lines 13 – 16, Column 8 lines 31 – 36).

Sandelman does not teach sending an inbound message, by the computer, to a communication module, a processor, a wireless module in electronic communication with the processor for wireless communications with the electronic device, a paging module in electronic communication with the processor for receiving pager communications from the computer through the paging network, a modem in electronic communication with the processor, and a memory in electronic communication with the processor, storing the inbound message in an inbound message queue.

Petite teaches sending an inbound message, by the computer, to a communication module (Section 0029 lines 1 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices), a processor (Figure 4, Section 0051 lines 5 – 7), a wireless module in electronic communication with the processor for wireless communications with the electronic device (Figure 1, Figure 4, Section 0023 lines 12 – 15), and sending the inbound message to the electronic device (Section 0029 lines 1 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices)

Sandelman and Petite (Section 0040 lines 11 – 15) both teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the method of sending an inbound message, a processor, and wireless

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module taught in Petite in the electronic message delivery server in Sandelman for the purpose of sending and receiving data transmissions to and from the HVAC systems via wireless links thereby creating a portable electronic message delivery system that can communicate with said HVAC system from a plurality of locations as taught by Petite.

Sandelman in view of Petite does not teach a paging module for receiving pager communications from the computer through the paging network and storing the inbound message in an inbound message queue.

Watkins teaches a paging module for receiving pager communications through the paging network (Section 0035 lines 12 – 15, Section 0035 lines 17 – 20).

Sandelman in view of Petite and Watkins (Section 0013 lines 1 – 5, Section 0019 lines 1 – 3) teach a remote monitoring system that monitors an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to make a design preference and use the paging module taught in Watkins in the electronic message delivery server in Sandelman in view of Petite for the purpose of providing an alternative wireless means for remotely controlling and monitoring said HVAC system as taught by Watkins.

Sandelman in view of Petite and in further view of Watkins does not teach storing the inbound message in an inbound message queue.

Smith teaches storing the inbound message in an inbound message queue (Section 0090 lines 8 – 10, Section 0149 lines 5 – 8, Section 0150 lines 4

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– 7, the messages to be sent to the various subsystems can be stored in a message queue).

Sandelman in view of Petite and in further view of Watkins and Smith teach a remote control system that controls an HVAC system thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the inbound message queue taught in Smith in the remote system of Sandelman in view of Petite and in further view of Watkins for the purpose of enabling a user to remotely control said HVAC system as taught by Smith.

Regarding Claim 60, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Sandelman further teaches communicating with the electronic device when the electronic device periodically contacts the communications module (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times).

Regarding Claim 61, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Petite further teaches wherein sending the inbound message to the electronic device is accomplished through use of the wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15, Section 0029 lines 1 - 12).

Regarding Claim 62, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Sandelman further teaches wherein sending the outbound message

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to the computer from the communication module is accomplished through use of the modem (Column 6 lines 38 – 46, Column 7 lines 13 – 16, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent).

Regarding Claim 63, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Sandelman further teaches programmed to periodically contact the computer using the modem (Column 6 lines 30 – 33, Column 6 lines 38 – 46, Column 7 lines 13 – 16, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times, said user can access said email via a computer, the message is sent via a telephone line to the internet thus there will be a modem such that said message can be sent).

Regarding Claim 64, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 63. Petite further teaches programmed to receive the inbound messages from the computer when the computer is periodically contacted (Section 0029 lines 8 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 65, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 64. Sandelman further teaches programmed to send the outbound messages to the computer when the computer is periodically contacted (Column

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6 lines 30 – 33, Column 6 lines 38 – 46, Column 8 lines 31 – 36, the exception condition can occur at a plurality of times thus causing the message delivery server to send a email to user at said plurality of times).

Regarding Claim 66, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Sandelman further teaches programmed to be periodically contacted by the electronic device (Column 6 lines 30 – 33, Column 6 lines 38 – 42, when an exception condition occurs the electronic device sends a message to the message delivery server, said condition can occur at a plurality of times), Petite further teaches a wireless module (Figure 1, Figure 4, Section 0023 lines 12 – 15).

Regarding Claim 67, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 66. Petite further teaches programmed to send the inbound messages to the electronic device when the electronic device periodically contacts the communication module (Section 0029 lines 1 – 12, the site controller will send messages from the laptop computer or workstation to the electronic devices at a plurality of times).

Regarding Claim 68, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 59. Petite further teaches programmed to identify the electronic device when the electronic device periodically contacts the communication module (Section 0056 lines 1 – 10).

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Regarding Claim 69, Sandelman in view of Petite in further view of Watkins and in further view of Smith teaches all of the claimed limitations recited in Claim 68. Petite further teaches searching for appropriate inbound messages for the electronic device and to transmit the appropriate inbound messages to the electronic device (Section 0029 lines 1 – 12, Section 0056 lines 1 – 10, the messages will be addressed to the desired transceiver and transmitted to said transceiver), Smith further teaches an inbound message queue (Section 0150 lines 4 – 7).

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



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**NICK CORSARO**  
**PRIMARY EXAMINER**



**Raymond S. Dean**  
**August 9, 2004**